Suzanne E. Fenton

Education

- B.S., University of Wisconsin, Madison, WI; Dairy Science, 1988.
- M.S., University of Wisconsin, Madison, WI; Endocrinology-Reproductive Biology, 1990.
- Ph.D., University of Wisconsin, Madison, WI; Endocrinology-Reproductive Biology, 1993.

Professional Experience

- 1998-present: Research Biologist, EPA.

Research Interests

- Lactational transfer of environmental chemicals to offspring and resulting health effects.
- Signaling mechanisms, endocrine disrupting toxicants, mammary gland development.
- Developmental exposure to environmental compounds and mammary tumor susceptibility.

Professional Activities

- Adjunct Faculty: Curriculum in Toxicology, University of North Carolina at Chapel Hill, Chapel Hill, NC.; School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC.; Depts. Biology & Chemistry, North Carolina Central University, Durham, NC.
- Editorial Board: Developmental and Reproductive Toxicology.
- Member, Multi-center Breast Cancer and the Environment Research Grant Working Group, National Institute of Environmental Health Sciences (NIEHS). 2006-2009.
- Expert Panelist, Mammary Gland Panel, National Toxicology Program Workshop on Rodent Models for Hormonally-Induced Reproductive Tumors, National Institute of Environmental Health Sciences (NIEHS). 2006.
- Core Member, National Children=s Study, Early Origins of Adult Health group. 2002-2005.
- Member, Study Assembly of the Longitudinal Cohort Study of Environmental Effects on Child Health and Development. 2002-2005.
- Member, Biological Sample Collection Panel, National Children's Study.`2005-2006.
- Briefing on perfluorooctanoic acid (PFOA), EPA Office of Pollution Prevention & Toxic Substances. 2005.

- Briefing on atrazine, EPA Office of Pollution Prevention & Toxic Substances. 2005.
- Participant, International Cancer Cohort Workshop, National Children's Study. 2005.
- Project co-leader, EPA Safe Pesticides/Safe Products (SP2) Implementation and Multiyear Plan. 2004.
- Lead, Exposure Working Group, Expert Panel on Human Milk Surveillance and Biomonitoring for Environmental Chemicals in the United States. 2004.
- Forum Panelist, Department of Health & Human Services, Office of Women=s Health, Workshop on Breast Cancer and the Environment. 2003.
- Investigator participant, EPA Human Health Implementation and Multiyear Planning. 2002.

Invited Lectures/Symposia

- 22nd Annual Meeting, American Association of Birth Centers: Environmental components found in breast milk: Findings from the MAMA Study. 2006.
- Perfluoroalkyl Acid (PFAA) Days, EPA, Research Triangle Park, NC: Effects of perfluorooctanoic acid developmental exposure on reproductive tissues. 2006.
- International Society of Exposure Analysis International Meeting: Methods advancement in milk analysis: The MAMA Study. 2005.
- Atrazine Workshop, Iowa City, IA: Gestational atrazine exposure in the rat: Effects on mammary gland development and function in multiple generations. 2005.
- Forum on Endocrine Disrupting Chemicals, Endocrine Society Meeting: Novel effects of dioxin on breast development, function, and susceptibility to cancer. 2005.
- 9th Annual International Conference on Environmental Mutagens/Environmental Mutagen Society: Environmental estrogens as cancer risk factors. 2005.
- Fifth Annual Conference on Sex and Gene Expression (SAGE V): Long-term effects of dioxin on reproductive development and sex determination. 2004.
- Gordon Conference, Environmental Endocrine Disruptors: Long-term effects of prenatal exposures to EDCs on the mammary gland of the female rat. 2004.
- Washington State University, Department of Toxicology: Prenatal environmental exposures and altered mammary tissue development. 2004.
- National Children=s Study Pilot Review: Methods Advancement in Milk Analysis (MAMA Study). 2003.
- EPA Office of Pollution Prevention and Toxic Substances, Workshop on Environmental Influences on Puberty: Effects of environmental toxicants during critical periods of mammary development. 2002.
- National Cancer Institute, Gene/Environment Interactions in Children's Health Meeting: Developmental exposures to endocrine disruptors. 2002.
- Environmental Health Sciences Center, University of Wisconsin-Madison, Madison, WI: TCDD-Mediated changes in mammary gland structure and function: Involvement of EGF-receptor ligands. 2002.

Selected Publications

Moon HJ, Fenton SE, Shin JH, Kang IH, Kim TS, Hong JH, Kim SH, Han S. 2007. Gestational exposure to nonylphenol causes precocious mammary gland development in female rat offspring. J Reprod Dev. 53:333-44. Abstract

White SS, Calafat AM, Kuklenyik Z, Villanueva L, Zehr RD, Helfant L, Strynar MJ, Lindstrom AB, Thibodeaux JR, Wood C, Fenton SE. 2007. Gestational PFOA exposure of mice is associated with altered mammary gland development in dams and female offspring. Toxicol Sci. 96:133-44. Abstract

Hines EP, Raynor JL, Barbee RR, Moreland RA, Valcour A, Schmid JE, Fenton SE. 2007. Assays for endogenous components of human milk: Comparison of fresh and frozen samples and corresponding analytes in serum. J Hum Lact. 23:144-56. Abstract

Wolf CJ, Fenton SE, Schmid JE, Calafat AM, Kuklenyik Z, Thibodeaux JR, Das K, White SS, Lau C, Abbott BD. 2007. Developmental toxicity of perfluorooctanoic acid (PFOA) after cross foster and restricted gestational exposures. Toxicol Sci. 95:462-73. Abstract

Rayner J, Enoch R, Wolf DC, Fenton SE. 2007. Atrazine-induced reproductive tract alterations after transplacental and lactational exposure in male Long-Evans rats. 218:238-248. Abstract

Enoch R, Stanko J, Greiner S, Youngblood G, Rayner J, Fenton SE. 2007. Mammary gland development as a sensitive end-point following acute prenatal exposure to a low dose atrazine metabolite mixture in female Long-Evans rats. Environ Health Perspect. 115:541-7. Abstract

Wang X, Bartolucci-Page E, Fenton SE, You L. 2006. Altered mammary gland development in male rats exposed to genistein and methoxychlor. Toxicol Sci. 91:93-103. Abstract

Fenton SE. 2006. Endocrine disrupting compounds (EDCs) and mammary gland development: Early exposure and later life consequences. Endocrinology. 147:s18-s24. Abstract

Fenton SE, Condon M, Ettinger AS, Lakind JS, Mason A, McDiarmid M, Qian Z, Selevan SG. 2005. Collection and use of exposure data from human milk biomonitoring in the United States. J Toxicol Environ Health. 68:1691-712. Abstract

Rayner JL, Enoch RR, Fenton SE. 2005. Adverse effects of prenatal exposure to atrazine during a critical period of mammary gland growth. Toxicol Sci. 87:255-266. Abstract

Khan MA, Fenton SE, Swank AE, Hester SD, Williams A, Wolf DC. 2005. A mixture of ammonium perchlorate and sodium chlorate enhances alterations of the

pituitary-thyroid axis caused by the individual chemicals in adult male F344 rats. Toxicol Pathol. 33:776-83. Abstract

Berlin CM, LaKind JS, Fenton SE, Wang RY, Bates MN, Brent RL, Condon M, Crase BL, Dourson ML, Ettinger AS, Foos B, Furst P, Giacoia GP, Goldstein DA, Haynes SG, Hench KD, Kacew S, Koren G, Lawrence RA, Mason A, McDiarmid MA, Moy G, Needham LL, Paul IM, Pugh LC, Qian Z, Salamone L, Selevan SG, Sonawane B, Tarzian AJ, Rose Tully M, Uhl K. 2005. Conclusions and recommendations of the expert panel: Technical workshop on human milk surveillance and biomonitoring for environmental chemicals in the United States. J Toxicol Environ Health A. 68:1825-31. Abstract

Rayner JL, Wood C, Fenton SE. 2004. Exposure parameters necessary for delayed puberty and mammary gland development in Long-Evans rats exposed *in utero* to atrazine. Toxicol Appl Pharmacol. 195:23-34. Abstract

Vorderstrasse BA, Fenton SE, Bohn AA, Cundiff JA, Lawrence BP. 2004. A novel effect of dioxin: Exposure during pregnancy severely impairs mammary gland differentiation. Toxicol Sci. 78:248-57. Abstract

Birnbaum LS, Fenton SE. 2003. Cancer and developmental exposure to endocrine disruptors. Environ Health Perspect. 111:389-94. Abstract

Fenton SE, Hamm JT, Birnbaum LS, Youngblood GL. 2002. Persistent abnormalities in the rat mammary gland following gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicol Sci. 67:63-74. Abstract